# 3.8 ENVIRONMENTAL HEALTH

This section describes the existing environmental site conditions. Information for this section was gathered from the following source:

- Phase I Environmental Site Assessment (ESA) and Asbestos-containing Building Materials and Lead-based Paint Surveys for Park Lake Homes[1]

**Figure 3.8-1** identifies the relevant buildings and adjacent properties addressed by the Phase I ESA.

## 3.8.1 Affected Environment

### Phase I ESA

The purpose of a Phase I ESA is to research and provide an opinion regarding the possible presence of subsurface contamination by hazardous materials that may exist on a property as a result of current and past on- or off-site activities. The Phase I ESA for the project site included research into the site's history, a site reconnaissance, and a review of existing environmental records. The site history is based on a review of readily available existing reports, aerial photographs, tax assessors records, city directories, permits, and interviews of selected individuals from King County Housing Authority (KCHA), Sheridan Consulting Group, and the Seattle Fire Marshall's office. The site reconnaissance was completed on November 25, 2002. The review of environmental records included selected files from the Washington State Department of Ecology (Ecology), and a search of federal, state and local databases (in accordance with the American Society for Testing and Materials [ASTM] Standard Practice for ESAs).

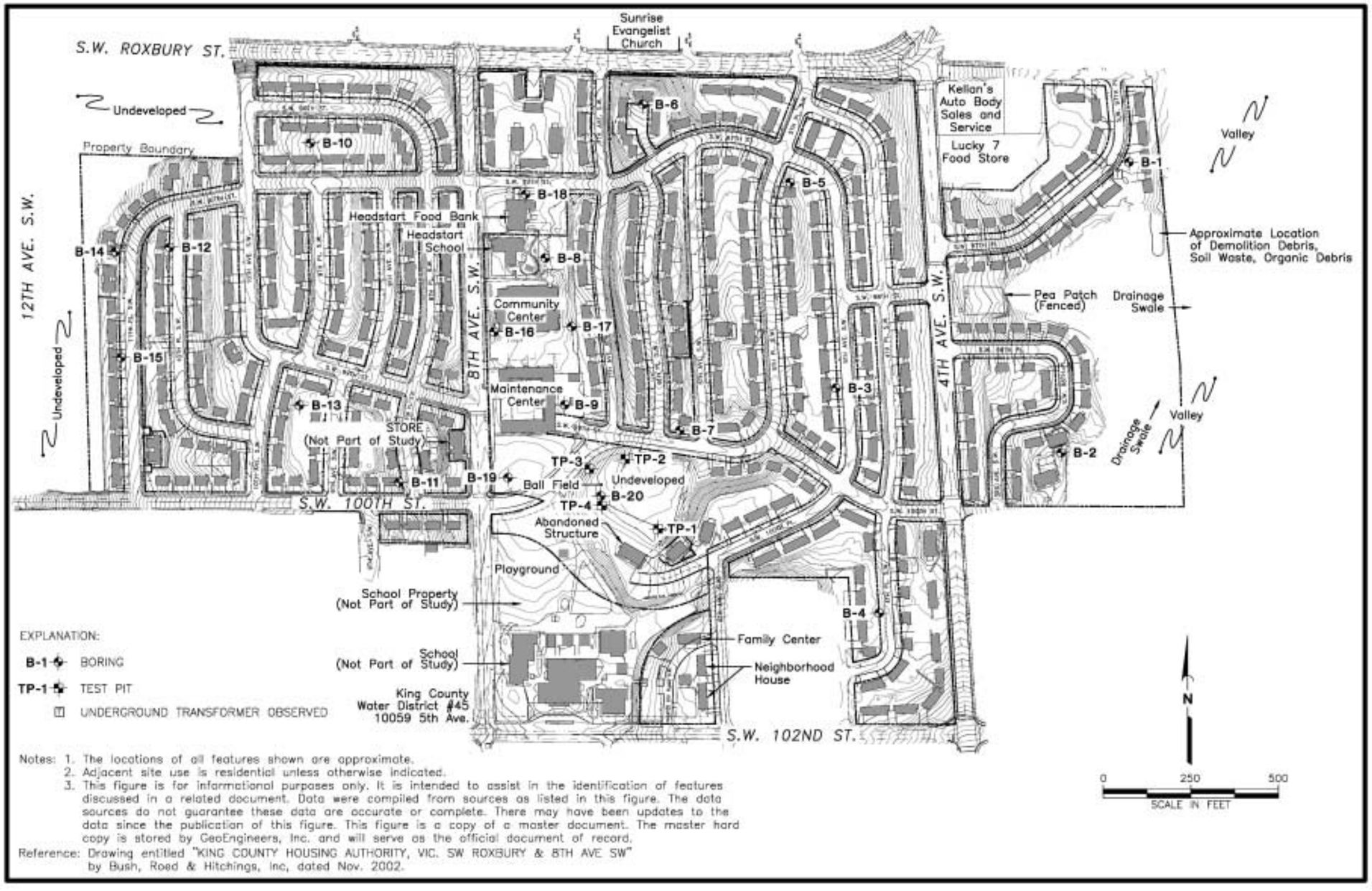
The Phase I ESA did not include an environmental compliance audit, an evaluation for the presence of toxic mold, polychlorinated biphenyls (PCBs) in light ballasts, radon, lead in drinking water or urea-formaldehyde foam insulation in on-site structures. KCHA will prepare a plan for the removal of these potential contaminants as part of its demolition plan for the proposed project.

#### *Site History*

A discussion of site and area-wide history is contained in *Section 3.11 Historic and Cultural Resources* of this Draft EIS. The following is a focused discussion relative to potential environmental site hazards.

By 1936, most of the main on-site north-south and east-west trending streets that exist today were present. The central portion of the site was developed with an apparent farm and orchard. Smaller structures were located on site in the southeast and southwest corners of the intersection of 4th Avenue Southwest and Southwest Roxbury Street. Adjacent properties generally were developed with scattered residences and farms.

[1] GeoEngineers, 2003.




Notes: 1. The locations of all features shown are approximate.
2. Adjacent site use is residential unless otherwise indicated.
3. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document. Data were compiled from sources as listed in this figure. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this figure. This figure is a copy of a master document. The master hard copy is stored by GeoEngineers, Inc. and will serve as the official document of record.

Reference: Drawing entitled "KING COUNTY HOUSING AUTHORITY, VIC. SW ROXBURY & 8TH AVE SW" by Bush, Roed & Hitchings, Inc, dated Nov. 2002.

Source: GeoEngineers, Inc.

Huckell/Weinman Associates, Inc.
HWA

Greenbridge

**Figure 3.8-1**

**Project Site and Surrounding Properties**

The project site was owned by The Boeing Company until 1943, when it was purchased by KCHA, the current owner. The original community building was constructed in 1943 and was located south of the current community center. As of 1943, a carpenter shop, paint locker and furnace room occupied portions of that building. Potable water, sanitary sewer and storm drain systems for the site were constructed during the 1940s. By 1946, the site was fully developed with the current residential housing and four non-residential structures located in the central portion of the site. Since its construction, heating oil was reportedly never used at the site. On-site structures were heated with coal stoves and electricity. Natural gas was an energy source at one time, however, gas is not currently being used and the gas lines have been abandoned (refer to *Section 3.13 Public Services and Utilities* of this Draft EIS).

Seven small structures were located around the current food bank building by 1960; these buildings were removed by 1974. By 1974, approximately eight residential structures were removed and vegetation cleared from the southwest portion of the site, north of the elementary school. Newer residential properties were present along the adjacent property to the north. Two larger non-residential structures were present at the adjacent property on the southeast corner of the intersection between 4th Avenue Southwest and Southwest Roxbury Street.

The current maintenance center was constructed in 1975. The Headstart building was constructed in 1978 and the current community center building in approximately 1980. Fill material from Kent, Washington was brought to the site prior to construction of the gymnasium at the current community center. There were no apparent odors associated with this fill. No other information concerning the specific origin, volume or quality of this fill was available.

By 1982, an apparent service station structure was located adjacent to the project site on the southeast corner of 4th Avenue SW and SW Roxbury Street (shallow groundwater in this area is inferred to flow toward the east).

Based on an interview with a site manager, an on-site underground storage tank (UST) that was located in the western portion of the maintenance center was removed several years ago. The specific location of this UST, its contents and purpose are not known. No known site check, site assessment or report were prepared for this UST.

According to the fire department, no records of chemical storage or USTs were on file for the site. However, one 1,000-gallon unleaded gasoline UST, product piping and a fuel dispenser that was located in the northeastern portion of the maintenance center was removed in 1998.

Concrete and asphalt fill debris from street repair and maintenance was deposited over the edge of the valley in the northeast portion of the site near 2nd Avenue SW.

The project site is within the “downwind plume” of lead and arsenic contamination from the historic Asarco smelter, which was located in Ruston, (Pierce County). This plant operated from the late 1800s through early 1998. The smelter site is more than 30 miles southwest of the project site. The Seattle-King County Department of Public Health is conducting a soil sampling study throughout King and Pierce counties in areas identified where lead and arsenic in the smelter plume could affect soil. The vicinity of the project site is targeted for soil sampling. However, the results of soil sampling were not available at the time the Phase I ESA was prepared.

Known or suspect environmental conditions identified in the site history:

- Asbestos-containing building materials, lead-based paint, PCB-containing light ballasts, mercury-filled lamps and mold are found in several of the residential and community structures on the site. These substances were identified in previous reports for the site, as identified and included in the Phase I ESA.
- Possible past use and storage of hazardous substances or petroleum associated with the original maintenance building, prior to 1975.
- Use and storage of hazardous substances and petroleum associated with the existing maintenance center.
- Two USTs, now removed, at the maintenance center.
- Imported fill that was placed on site.
- Placement of waste concrete, asphalt and other fill to the hillside area east of the site.
- Former service station adjacent to the site (shallow groundwater in this area is inferred to flow toward the east).

***Site Reconnaissance***

A site visit was completed to observe project site conditions and to assess the preliminary conditions developed from the office review of maps, aerial photographs, data searches and interviews. Known or suspect environmental conditions identified by a visual reconnaissance of the project site are listed below:

- Asbestos-containing building materials and lead-based paint associated with on-site structures.
- Use and storage of hazardous substances including paints, solvents, fuels and cleaners in the maintenance center.
- Numerous floor drains in the maintenance center are connected to the storm drain system and one-floor drain discharges to a dry well.
- On-site storage of new and waste oil in an above-ground storage tank (AST) and 55-gallon drums in the maintenance center. Oil staining on the concrete floor is present in the vicinity of the AST and 55-gallon drums. Cracks in the underlying concrete were observed in the vicinity of the AST.
- Two historic USTs located at the maintenance center (as identified in the Site History section).
- Chemical substances and fertilizer are stored at the maintenance center.
- One underground hydraulic hoist is situated in the northeastern portion of the maintenance center.
- Two underground electrical transformers were observed in the southeastern portion of the site. Other transformers may exist on the site. Seattle City Light apparently owns and maintains all of the on-site transformers.

Known or suspect environmental conditions identified by a visual reconnaissance of adjacent properties:

- Possible heating oil tanks (ASTs and/or USTs) associated with: adjacent residential properties to the north, south and west; an adjacent church to the north; and an adjacent school to the south.

- Possible petroleum-related chemicals, paints, glues and solvents related to an auto body business (Kellan's Auto Body) and possible past or existing USTs associated with a possible former service station.
- Possible past or existing USTs associated with a former service station (Lucky 7 Food Store).

***Environmental Records Review***

The site was listed as a Resource Conservation and Recovery Act (RCRA) - small quantity generator. The site also is listed on the registered UST list, the Leaking UST list and the Washington Independent Cleanup Report list related to the UST removed in 1998. **Table 3.8-1** below summarizes the listed facilities that could pose a Recognized Environmental Condition (REC) to the proposed redevelopment site.

Table 3.8-1
SUMMARY OF REGULATORY DATABASE SEARCH LISTINGS
OF POTENTIAL ENVIRONMENTAL CONCERN

| Location | Listed Business | Listed Address | Regulatory Database | Description |
|---|---|---|---|---|
| Subject Site | Park Lake Homes | 9900 - 8th Avenue SW | RCRA-small quantity generator, Registered UST, Leaking UST and Washington Independent Cleanup Report | • The RCRA listing is associated with the maintenance facility. Listing also references facility as an oil recycler. No violations were found associated with this activity.<br>• A 1,000-gallon unleaded gasoline UST, installed in 1984 was removed in 1998. Ecology files list the release as "cleaned up." The concentrations of benzene and gasoline in one soil sample from the base of the 1998 excavation exceeded the current MTCA Method A cleanup levels. Groundwater quality associated with this release is not documented. |

| Location | Listed Business | Listed Address | Regulatory Database | Description |
|---|---|---|---|---|
| Adjacent northeast | 7-11-2322-14460 (Lucky 7 Food Store) | 9618 4th Avenue SW | Registered UST | Two 20,000-gallon USTs contained leaded and unleaded gasoline. The tanks were installed in 1964 and have since been removed (unknown removal date – prior to installation of the tanks installed in 1984). |

No Department of Ecology files were available for the 7-11 (Lucky 7 Food Store) or auto body (Kellan's Auto Body) facilities. General information about the 7-11 site was obtained from the registered UST list.

Known or suspect environmental conditions identified by a review of the environmental records relate to the release(s) of gasoline to soil from the UST removed in 1998 at the maintenance center. The Department of Ecology's files list the release as "cleaned up." The concentrations of benzene and gasoline in one soil sample from the base of the 1998 excavation were less than cleanup levels that existed at the time that the UST was removed. However, the concentrations exceeded the current MTCA Method A cleanup levels in place in 2001. Groundwater quality associated with this release was not documented.

***Summary of Phase I ESA***

Known or suspect environmental conditions that represent Recognized Environmental Condition for the project site:

- Asbestos-containing building materials, PCB-containing fluorescent light ballasts, mercury-containing lamps and lead-based paint associated with on-site structures.
- Potential lead and arsenic over the entire site related to fallout from the historic Asarco smelter operations in Ruston, Washington.
- On-site maintenance activities that occurred from about 1943 to 1975 in the original maintenance building may have used and stored hazardous substances including paints, solvents, fuels and cleaners, and may have generated hazardous wastes.
- Activities conducted in the existing maintenance center involve the use and storage of hazardous substances including paints, solvents, fuels and cleaners. These activities generate some waste or spent materials; however, no on-site disposal of wastes was observed or reported, with one significant exception: between about 1975 and the mid-1990s, there was alleged on-site disposal of waste oil to a drywell located in the mechanics shop of the maintenance building. The quantity of waste oil and frequency of releases of waste oil to the drywell were not reported. Numerous floor drains in the maintenance center are connected to the storm drain system, and one floor drain discharges to the ground via a dry well. Existing Maintenance Facility.
- Storage of new and waste oil in an AST and 55-gallon drums in the maintenance center. Oil staining on the concrete floor is present in the vicinity of the AST and 55-gallon drums. Cracks in the underlying concrete were observed in the vicinity of the AST.

- Storage of chemical substances and fertilizer in the maintenance center.
- One underground hydraulic hoist is located in the maintenance center.
- Two historic USTs were located at the existing maintenance center. Little information, other than a general location, is available regarding one of the removed USTs. The other UST that stored unleaded gasoline was removed in 1998 and had a documented release(s) of gasoline to the soil. The Department of Ecology's files list the release as "cleaned up." The concentrations of benzene and gasoline in one soil sample from the base of the 1998 excavation were less than cleanup levels that existed at the time the UST was removed; however, the concentrations exceeded the current MTCA Method A cleanup levels adopted in 2001. Groundwater quality associated with this release was not documented.
- Fill was imported to the site during construction of the on-site gymnasium. Information concerning the origin of this fill indicates that it came from Kent, Washington and that there was no reported staining or odors associated with the material.
- Waste concrete, asphalt and other fill were deposited over the edge of the valley in the northeastern portion of the site.
- An automobile body and repair shop and a former service station located adjacent to the northeast corner of the site.

The other known or suspect environmental conditions described in the Phase I ESA are not considered to be RECs because existing releases, past releases or material threats of releases of hazardous substances into the ground or structures at the site from these sources were not identified.

There is a moderate to high potential for soil, groundwater or surface water contamination resulting from the following conditions:

- Possible releases to the ground from maintenance-related activities utilizing paints, solvents, fuels and cleaners at the original maintenance facility.
- Possible releases to the ground, floor drains or dry well from maintenance-related activities utilizing paints, solvents, fuels and cleaners and from oil storage, including one underground hydraulic hoist, at the current maintenance center.
- A documented gasoline release occurred at the UST removed from the current maintenance center in 1998.
- Imported fill of unknown origin that was placed at the gymnasium may have contained contaminants.
- Surface soil at the site may have been impacted by lead and arsenic in downwind fallout from the historic Asarco smelter operations in Ruston (Pierce County).

In and of themselves, the items listed above do not constitute evidence of a release that would be reportable under MTCA. Evidence of a release could possibly be encountered in the future in soil, groundwater or surface sampling. The other listed RECs are considered to pose a low potential for soil, groundwater or surface water contamination.